

PCT09

RAW SEQUENCE LISTING
 PATENT APPLICATION: US/09/762,261

DATE: 02/16/2001
 TIME: 09:39:05

Input Set : A:\5001hjus.app
 Output Set: N:\CRF3\02162001\I762261.raw

ENTERED

3 <110> APPLICANT: Quinnan, Gerald V.
 4 Zhang, Peng Fei
 5 Henry M. Jackson Foundation
 7 <120> TITLE OF INVENTION: Expression and Characterization of HIV-1 Envelope
 8 Protein Associated with a Broadly Reactive Neutralizing
 9 Antibody Response
 11 <130> FILE REFERENCE: 44508-5001-US
 C--> 13 <140> CURRENT APPLICATION NUMBER: US/09/762,261
 C--> 14 <141> CURRENT FILING DATE: 2001-02-05
 16 <150> PRIOR APPLICATION NUMBER: US 60/095,267
 17 <151> PRIOR FILING DATE: 1998-08-04
 19 <150> PRIOR APPLICATION NUMBER: PCT/US99/17596
 20 <151> PRIOR FILING DATE: 1999-08-04
 22 <160> NUMBER OF SEQ ID NOS: 4
 24 <170> SOFTWARE: PatentIn Ver. 2.1
 26 <210> SEQ ID NO: 1
 27 <211> LENGTH: 866
 28 <212> TYPE: PRT
 29 <213> ORGANISM: Human immunodeficiency virus type 1
 31 <220> FEATURE:
 32 <223> OTHER INFORMATION: R2 strain envelope protein (gp 160)
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 36 1 5 10 15
 38 Gly Thr Met Leu Leu Gly Leu Leu Met Ile Cys Ser Ala Thr Glu Lys
 39 20 25 30
 41 Leu Trp Val Thr Val Tyr Tyr Gly Val Pro Val Trp Lys Glu Ala Thr
 42 35 40 45
 44 Thr Thr Leu Phe Cys Ala Ser Asp Ala Lys Ala Tyr Asp Thr Glu Ala
 45 50 55 60
 47 His Asn Val Trp Ala Thr His Ala Cys Val Pro Thr Asp Pro Asn Pro
 48 65 70 75 80
 50 Gln Glu Val Glu Leu Val Asn Val Thr Glu Asn Phe Asn Met Trp Lys
 51 85 90 95
 53 Asn Asn Met Val Glu Gln Met His Glu Asp Ile Ile Ser Leu Trp Asp
 54 100 105 110
 56 Gln Ser Leu Lys Pro Cys Val Lys Leu Thr Pro Leu Cys Val Thr Leu
 57 115 120 125
 59 Asn Cys Thr Asp Leu Arg Asn Thr Thr Asn Thr Asn Asn Ser Thr Asp
 60 130 135 140
 62 Asn Asn Asn Ser Asn Ser Glu Gly Thr Ile Lys Gly Gly Glu Met Lys
 63 145 150 155 160
 65 Asn Cys Ser Phe Asn Ile Ala Thr Ser Ile Gly Asp Lys Met Gln Lys
 66 165 170 175
 68 Glu Tyr Ala Leu Leu Tyr Lys Leu Asp Ile Glu Pro Ile Asp Asn Asp
 69 180 185 190
 71 Asn Thr Ser Tyr Arg Leu Ile Ser Cys Asn Thr Ser Val Ile Thr Gln

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72          195          200          205
74  Ala Cys Pro Lys Ile Ser Phe Glu Pro Ile Pro Ile His Tyr Cys Ala
75          210          215          220
77  Pro Ala Gly Phe Ala Ile Leu Lys Cys Asn Asp Lys Lys Phe Ser Gly
78  225          230          235          240
80  Lys Gly Ser Cys Lys Asn Val Ser Thr Val Gln Cys Thr His Gly Ile
81          245          250          255
83  Arg Pro Val Val Ser Thr Gln Leu Leu Leu Asn Gly Ser Leu Ala Glu
84          260          265          270
86  Glu Glu Val Val Ile Arg Ser Glu Asn Phe Thr Asn Asn Ala Lys Thr
87          275          280          285
89  Ile Ile Val Gln Leu Arg Glu Pro Val Lys Ile Asn Cys Ser Arg Pro
90          290          295          300
92  Asn Asn Asn Thr Arg Lys Ser Ile Pro Met Gly Pro Gly Arg Ala Phe
93  305          310          315          320
95  Tyr Thr Thr Gly Gln Ile Ile Gly Asp Ile Arg Gln Ala His Cys Asn
96          325          330          335
98  Ile Ser Lys Thr Asn Trp Thr Asn Ala Leu Lys Gln Val Val Glu Lys
99          340          345          350
101  Leu Gly Glu Gln Phe Asn Lys Thr Lys Ile Val Phe Thr Asn Ser Ser
102          355          360          365
104  Gly Gly Asp Pro Glu Ile Val Thr His Ser Phe Asn Cys Ala Gly Glu
105          370          375          380
107  Phe Phe Tyr Cys Asn Thr Thr Gln Leu Phe Asp Ser Ile Trp Asn Ser
108  385          390          395          400
110  Glu Asn Gly Thr Trp Asn Ile Thr Arg Gly Leu Asn Asn Thr Gly Arg
111          405          410          415
113  Asn Asp Thr Ile Thr Leu Pro Cys Arg Ile Lys Gln Ile Ile Asn Arg
114          420          425          430
116  Trp Gln Glu Val Gly Lys Ala Met Tyr Ala Pro Pro Ile Lys Gly Asn
117          435          440          445
119  Ile Ser Cys Ser Ser Asn Ile Thr Gly Leu Leu Leu Thr Arg Asp Gly
120          450          455          460
122  Gly Lys Asp Asp Asn Ser Arg Asp Gly Asn Glu Thr Phe Arg Pro Gly
123  465          470          475          480
125  Gly Gly Asp Met Arg Asp Asn Trp Arg Ser Glu Leu Tyr Lys Tyr Lys
126          485          490          495
128  Val Val Lys Ile Glu Pro Leu Gly Val Ala Pro Thr Lys Ala Lys Arg
129          500          505          510
131  Arg Val Val Gln Arg Glu Glu Arg Ala Val Gly Leu Gly Ala Met Phe
132          515          520          525
134  Ile Gly Phe Leu Gly Ala Ala Gly Ser Thr Met Gly Ala Ala Ser Val
135          530          535          540
137  Thr Leu Thr Val Gln Ala Arg Gln Leu Leu Ser Gly Ile Val Gln Gln
138  545          550          555          560
140  Gln Ser Asn Leu Leu Arg Ala Ile Glu Ala Gln Gln His Leu Leu Gln
141          565          570          575
143  Leu Thr Val Trp Gly Ile Lys Gln Leu Gln Ala Arg Ile Leu Ala Val
144          580          585          590

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146   Glu Arg Tyr Leu Lys Asp Gln Gln Leu Leu Gly Ile Trp Gly Cys Ser
147           595                      600                      605
149   Gly Lys Leu Ile Cys Thr Thr Val Pro Trp Asn Ala Ser Trp Ser
150           610                      615                      620
152   Lys Asn Lys Thr Leu Glu Ala Ile Trp Asn Asn Met Thr Trp Met Gln
153           625                      630                      635                      640
155   Trp Asp Lys Glu Ile Asp Asn Tyr Thr Lys Leu Ile Tyr Ser Leu Ile
156           645                      650                      655
158   Glu Glu Ser Gln Ile Gln Gln Glu Lys Asn Glu Gln Glu Leu Leu Glu
159           660                      665                      670
161   Leu Asp Lys Trp Ala Asn Leu Trp Asn Trp Phe Asp Ile Ser Asn Trp
162           675                      680                      685
164   Leu Trp Tyr Ile Lys Ile Phe Ile Met Ile Val Gly Gly Leu Val Gly
165           690                      695                      700
167   Leu Arg Ile Val Phe Val Val Leu Ser Ile Val Asn Arg Val Arg Gln
168           705                      710                      715                      720
170   Gly Tyr Ser Pro Leu Ser Phe Gln Thr Arg Leu Pro Ala Pro Arg Gly
171           725                      730                      735
173   Pro Asp Arg Pro Glu Glu Ile Glu Glu Glu Gly Gly Asp Arg Asp Arg
174           740                      745                      750
176   Asp Arg Ser Gly Leu Leu Val Asp Gly Phe Leu Thr Leu Ile Trp Val
177           755                      760                      765
179   Asp Leu Arg Ser Leu Cys Leu Phe Ser Tyr His Arg Leu Arg Asp Leu
180           770                      775                      780
182   Leu Leu Ile Val Thr Arg Ile Val Glu Leu Leu Gly Arg Arg Gly Trp
183           785                      790                      795                      800
185   Glu Ile Leu Lys Tyr Trp Trp Asn Leu Leu Gln Tyr Trp Ser Gln Glu
186           805                      810                      815
188   Leu Lys Asn Ser Ala Val Ser Leu Phe Asn Ala Thr Ala Ile Ala Val
189           820                      825                      830
191   Ala Glu Gly Thr Asp Arg Val Ile Gln Val Leu Gln Arg Val Gly Arg
192           835                      840                      845
194   Ala Leu Leu His Ile Pro Thr Arg Ile Arg Gln Gly Leu Glu Arg Ala
195           850                      855                      860
197   Leu Leu
198   865
201 <210> SEQ ID NO: 2
202 <211> LENGTH: 17
203 <212> TYPE: PRT
204 <213> ORGANISM: Human immunodeficiency virus type 1
206 <220> FEATURE:
207 <223> OTHER INFORMATION: segment of R2 strain V3 domain
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211       1                      5                      10                      15
213   Ile
217 <210> SEQ ID NO: 3
218 <211> LENGTH: 35
219 <212> TYPE: PRT

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220 <213> ORGANISM: Human immunodeficiency virus type 1
222 <220> FEATURE:
223 <223> OTHER INFORMATION: R2 strain V3 domain
225 <400> SEQUENCE: 3
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227 1 5 10 15
229 Gly Arg Ala Phe Tyr Thr Thr Gly Gln Ile Ile Gly Asp Ile Arg Gln
230 20 25 30
232 Ala His Cys
233 35
236 <210> SEQ ID NO: 4
237 <211> LENGTH: 35
238 <212> TYPE: PRT
239 <213> ORGANISM: Human immunodeficiency virus type 1
241 <220> FEATURE:
242 <223> OTHER INFORMATION: V3 domain of strain 93TH966.8
244 <400> SEQUENCE: 4
245 Cys Thr Arg Pro Ser Asn Asn Thr Arg Thr Ser Thr Thr Ile Gly Pro
246 1 5 10 15
248 Gly Gln Val Phe Tyr Arg Thr Gly Asp Ile Thr Gly Asn Ile Arg Lys
249 20 25 30
251 Ala Tyr Cys
252 35

VERIFICATION SUMMARY

PATENT APPLICATION: US/09/762,261

DATE: 02/16/2001

TIME: 09:39:06

Input Set : A:\5001hjus.app

Output Set: N:\CRF3\02162001\I762261.raw

L:13 M:270 C: Current Application Number differs, Replaced Application Number
L:14 M:271 C: Current Filing Date differs, Replaced Current Filing Date